

Remarks

Reconsideration of this Application is respectfully requested. Upon entry of the foregoing Amendment, claims 1, 4-6, 8-17, and 19-30 are pending in the application, of which claims 1, 14, 21, and 27 are independent. By the foregoing Amendment, claims 1, 4, 6, 8, 10-12, 14, 16, 21, 24 and 27 are sought to be amended. Claims 7 and 18 are sought to be cancelled without prejudice or disclaimer. No new matter is embraced by this amendment and its entry is respectfully requested. Based on the above Amendment and the remarks set forth below, it is respectfully requested that the Examiner reconsider and withdraw all outstanding rejections.

Rejection under 35 U.S.C. § 112

The Examiner, on page 2 of the Office Action, has rejected claims 1 and 4-13 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner states that the claim language of “a task executable” is unclear. Applicant has amended claims 1, 4, 6, and 10-12 to change “a task executable” to “a task that can be executed” to overcome this rejection. Applicant respectfully requests that the Examiner review the amended claims and withdraw this rejection.

Rejection under 35 U.S.C. § 103

The Examiner, on page 3 of the Office Action, has rejected claims 1 and 4-30 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,823,351 to Flood

et al. (hereinafter “Flood”). Applicant respectfully traverses this rejection. Based on the remarks set forth below, Applicant respectfully requests that this rejection be reconsidered and withdrawn.

With respect to independent claim 1, the Examiner states that Flood teaches the invention substantially as claimed. The Examiner further states on page 4 of the Office Action that:

Flood does not explicitly teach that a second stack of tasks associated with a second thread. However, Flood teaches a separate work queue ... is created for each thread (col. 4, lines 26-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made that in fact Flood’s system provide a second stack of tasks associated with a second thread because it would minimize[s] interrupting or blocking of the owner’s operation.

Applicant respectfully disagrees. Flood does not teach or suggest every element of Applicant’s invention. For example, Flood does not teach or suggest at least Applicant’s elements of: “determining if the second stack of tasks contains a task that can be executed by the first thread by examining a bit mask, wherein the bit mask is locked before the bit mask is examined” and “wherein if the executed task is a taskq task, storing any additional tasks generated by the taskq task in the second stack.”

Unlike the present invention, Flood does not lock the bit mask before the bit mask is examined. Instead, Flood teaches “copying the work to lockable auxiliary queues from which work may be stolen” (*Flood*, col. 4, lines 18-20). Flood also teaches if pushing another object pointer onto its queue would overflow the queue, the thread will obtain a lock on the overflow data structure. *Flood*, col. 11, lines 32-51; col. 12, lines 11-13. Thus, unlike the present invention which locks the bit mask before the bit mask is

examined, Flood teaches copying the work to lockable auxiliary queues and obtaining a lock on the overflow data structure.

Contrary to the present invention, Flood also does not teach “storing any additional tasks generated by the taskq task in the second stack.” Instead, the section of Flood cited by the Examiner teaches “if thread T1 steals from the queue 42 of thread T2, the successfully stolen task may contain a reference 35 which is stored on the stealing threads queue for later processing.” *Flood*, col. 9, lines 1-5. Thus, unlike the present invention, which teaches “storing any additional tasks generated by the taskq task in the second stack,” Flood stores the reference on the stealing threads queue, not the queue from the taskq task was found.

For at least the above reasons, Applicant’s claim 1, and the claims that depend therefrom (claims 4-6 and 8-13), are patentable over Flood. Independent claims 14, 21, and 27 include similar elements as those recited in claim 1. Thus, for at least the same reasons, independent claims 14, 21, and 27, and the claims that depend therefrom (claims 15-17 and 19-20, claims 22-26, and claims 28-30, respectively), are also patentable over Flood. Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of independent claims 1, 14, 21, and 27, and the claims that depend therefrom.

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Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all currently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Response is respectfully requested.

Respectfully submitted,

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